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IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE
ART UNIT 2615
Examiner H. Nguyen

Richard A. Lang
CASE 284
SERIAL NO. 07/976,542
FILED November 16, 1992
SUBJECT AUDIO/VIDEO RECORDER/TRANSCEIVER

THE COMMISSIONER OF PATENTS AND TRADEMARKS
WASHINGTON, D.C. 20231

SIR:

AMENDMENT "A"

In response to the Office Action mailed May 26, 1993, please amend the above-identified patent application as indicated by the following:

In the drawings

Please amend Figure 2 of the drawings in accordance with the attached Letter to the Chief Draftsman to correct a spelling error.

In the specification

Page 1, line 1, cancel the present title and substitute the new title

~~BURST TRANSMISSION APPARATUS AND METHOD FOR AUDIO/VIDEO INFORMATION--~~

~~120 WP 10/15/93 07976542 1 203 891.00 OK
120 WP 10/15/93 07976542 1 202 185.00 OK~~

In the claims

[Please amend claims 42, 48, 51, 53, 73-75, and 113, and add new method claims 114-194, as indicated by the following:]

Claim 42, line 14, delete "seially" and substitute --serially--;

Claim 48, line 10, delete "random access";

Claim 51, line 5, delete "random access memory" and substitute --
storage--;

Claim 53, line 5, delete "random access memory" and substitute --
storage--;

Claim 73, line 4, delete "random";

Claim 73, line 5, delete "access";

Claim 74, line 7, delete "storing" and substitute --recording--;

Claim 75, line 4, delete "storing" and substitute --recording--;

Claim 75, line 5, delete "on said hard" and substitute --onto said
removable recording--;

Claim 75, line 6, delete "copy storage"; and

Claim 113, line 9, delete the period and substitute a semicolon.

114. A method for handling audio/video source information, the method
comprising:

receiving audio/video source information;

compressing the received audio/video source information into a time
compressed representation thereof;

storing the time compressed representation of said audio/video source
information; and

serially transmitting said stored time compressed representation of
said audio/video source information in a burst time period that is shorter
than a time period associated with real time viewing of said audio/video
source information.

SUB D10 115. A method as in claim 114 further comprising the steps of:

editing the time compressed representation of said audio/video source
information stored in said storage means;

storing the edited time compressed representation of said audio/video
source information in said storage means; and

receiving the edited time compressed representation of said audio/video

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source information stored in said storage means for transmission away from said audio/video transceiver apparatus.

116. A method as in claim 115 further comprising the step of monitoring the stored, time compressed representation of said audio/video source information to enable the user to selectively identify the time compressed representation of said audio/video source information stored in said storage means during editing.

SUBD11

117. A method as in claim 114 wherein the step of transmitting comprises transmitting said time compressed representation of said audio/video source information over an optical channel.

*CJ
and*

118. A method as in claim 114 wherein the step of transmitting comprises transmitting said time compressed representation of said audio/video source information over a telephone transmission channel.

119. A method as in claim 114 wherein the step of storing comprises storing the time compressed representation of said audio/video source information on an optical disc.

120. A method as in claim 114 wherein the step of storing comprises storing the time compressed representation of said audio/video source information in a semiconductor memory.

121. A method as in claim 114 wherein:

said audio/video source information comprises analog audio/video source information;

said method further comprises the step of converting said analog audio/video source information to corresponding digital audio/video source information;

said step of compressing comprises compressing said corresponding digital audio/video source information into a digital time compressed representation thereof; and

said step of storing comprises storing said digital time compressed representation of said corresponding digital audio/video source information.

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CPL*
122. A method as in claim 114 wherein:
said audio/video source information comprises digital audio/video
source information;
said step of compressing comprises compressing said digital audio/video
source information into a digital time compressed representation thereof; and
said step of storing comprises storing said digital time compressed
representation of said digital audio/video source information.
123. A method as in claim 121 wherein said analog audio/video source
information comprises information received from an external television camera.
124. A method as in claim 121 wherein said analog audio/video source
information comprises information received from an external analog video tape
recorder.
125. A method as in claim 121 wherein said analog audio/video source
information comprises information received from an external television RF
tuner.
126. A method as in claim 121 wherein said analog audio/video source
information comprises information transmitted by a remotely located television
transmitter.
127. A method as in claim 121 wherein said analog audio/video source
information comprises information received from an external cable television
system.
128. A method as in claim 122 wherein said digital audio/video source
information comprises computer-generated audio/video information.
129. A method as in claim 122 wherein said digital audio/video source
information comprises information received over a fiber optic transmission
line.
130. A method for handling audio/video source information, the method
comprising:
receiving audio/video source information as a time compressed
representation thereof, said audio/video source information comprising a

~~multiplicity of video frames in the form of one or more full motion video programs, said time compressed representation of said audio/video source information being received over an associated burst time period that is shorter than a time period associated with real time viewing of said audio/video source information;~~

~~storing the time compressed representation of said audio/video source information received by said input means; and~~

~~serially transmitting said stored time compressed representation of said audio/video source information away from said audio/video transceiver apparatus.~~

SUBD12 131. A method as in claim 130 wherein said audio/video source

~~information comprises information received from a video library, said video library storing a multiplicity of programs, each of said programs comprising a multiplicity of video frames in the form of a full motion video program, each of said programs being stored in said time compressed representation for selective retrieval, in said associated burst time period over a fiber optic transmission line, by the user.~~

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132. A method as in claim 130 wherein said audio/video source information comprises information received from a video library, said video library storing a multiplicity of programs, each of said programs comprising a multiplicity of video frames in the form of a full motion video program, each of said programs being stored in said time compressed representation for selective retrieval, in said associated burst time period, over a communication link.

133. A method as in claim 114 further comprising the steps of:
selectively decompressing said time compressed representation of said audio/video source information stored in said storage means; and
editing said selectively decompressed time compressed representation of said audio/video source information; and
storing said edited selectively decompressed time compressed

representation of said audio/video source information in said storage means.

134. A method as in claim 114 further comprising the steps of:

selectively decompressing said time compressed representation of said audio/video source information stored in said storage means;

editing said selectively decompressed time compressed representation of said audio/video source information;

recompressing the edited selectively decompressed time compressed representation of said audio/video source information; and

storing the recompressed selectively decompressed time compressed representation of said audio/video source information.

135. A method as in claim 114 further comprising the steps of:

selectively decompressing the time compressed representation of said audio/video source information stored in said storage means; and

visually displaying the selectively decompressed time compressed representation of said audio/video source information for viewing by a user.

136. A method as in claim 121 further comprising the steps of:

selectively decompressing the digital time compressed representation of said corresponding digital audio/video source information stored in said storage means;

editing the decompressed digital time compressed representation of said corresponding digital audio/video source information; and

storing the edited decompressed digital time compressed representation of said corresponding digital audio/video source information in said storage means.

137. A method as in claim 136 further comprising the step of visually displaying the decompressed digital time compressed representation of said corresponding digital audio/video source information for selective viewing by a user during editing.

SUBD13 138. A method as in claim 121 further comprising the steps of:

selectively decompressing the digital time compressed representation of

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said corresponding digital audio/video source information stored in said storage means; and

visually displaying the decompressed digital time compressed representation of said corresponding digital audio/video source information for selective viewing by a user.

139. A method as in claim 122 further comprising the steps of:

selectively decompressing the digital time compressed representation of said digital audio/video source information stored in said storage means;

editing the decompressed digital time compressed representation of said digital audio/video source information; and

storing the edited decompressed digital time compressed representation of said digital audio/video source information in said storage means.

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140. A method as in claim 139 further comprising the step of visually displaying the decompressed digital time compressed representation of said digital audio/video source information for selective viewing by a user during editing.

SUBD14 141. A method as in claim 122 further comprising the steps of:

selectively decompressing the digital time compressed representation of said digital audio/video source information stored in said storage means; and
visually displaying the decompressed digital time compressed representation of said digital audio/video source information for selective viewing by a user.

142. A method as in claim 121 wherein said analog audio/video source information is received from a video tape recorder.

SUB
HM 143. A method for handling audio/video source information, the method comprising:

providing a network that includes a plurality of audio/video transceivers, coupled via one or more communications links;

receiving audio/video source information at one or more of said plurality of audio/video transceivers, said audio/video source information

comprising a multiplicity of video frames in the form of one or more full motion video programs;

compressing said audio/video source information into a time compressed representation thereof having an associated burst time period that is shorter than a time period associated with real time viewing of said audio/video source information;

storing the time compressed representation of said audio/video source information; and

serially transmitting said stored time compressed representation of said audio/video source information in said burst time period to another one of said plurality of audio/video transceivers.

144. A method as in claim 143 wherein said audio/video source information is received over one or more optical transmission channels and the stored time compressed representation of the received audio/video source information is transmitted over one or more optical transmission channels.

145. A method as in claim 143 wherein the stored time compressed representation of the received audio/video source information is transmitted over one or more telephone transmission channels.

146. A method as in claim 143 wherein said time compressed representation of said audio/video source information is stored in an optical disc memory.

147. A method as in claim 143 wherein said time compressed representation of said audio/video source information is stored in a semiconductor memory.

148. A method as in claim 143 wherein one of said plurality of audio/video transceivers stores a library comprising a multiplicity of items of audio/video source information in said time compressed representation for selective transmission, in said associated burst time period, to another one of said audio/video transceivers.

149. A method as in claim 143 further comprising the step of recording

the time compressed representation of said audio/video source information stored in said storage means onto a removable recording medium.

SUBD15

150. A method as in claim 143 further comprising the steps of:
decompressing the time compressed representation of said audio/video source information stored in said storage means; and
storing the decompressed time compressed format representation of said audio/video source information onto a removable recording medium.

151. A method as in claim 149 wherein said stored time compressed representation of said audio/video source information is recorded onto a magnetic tape within a video tape recorder.

152. A method as in claim 150 wherein said stored time compressed representation of said audio/video source information is recorded onto a magnetic tape within a video tape recorder.

153. A method as in claim 149 wherein said stored time compressed representation of said audio/video source information is recorded onto one or more write-once read-many (WORM) optical discs within an optical disc drive.

154. A method as in claim 150 wherein said stored time compressed representation of said audio/video source information is recorded onto one or more write-once read-many (WORM) optical discs within an optical disc drive.

155. A method as in claim 149 wherein said stored time compressed representation of said audio/video source information is recorded onto one or more erasable optical discs within an optical disc drive.

156. A method as in claim 150 wherein said stored time compressed representation of said audio/video source information is recorded onto one or more erasable optical discs within an optical disc drive.

SUBD16

157. A method as in claim 114 further comprising the step of recording the stored time compressed representation of said audio/video source information onto a removable recording medium.

158. A method as in claim 115 further comprising the step of recording the edited time compressed representation of said audio/video source

information onto a removable recording medium.

159. A method as in claim 158 further comprising the step of visually displaying said time compressed representation of said audio/video source information stored on said removable recording medium for selective viewing by a user.

SUBD17 160. A method as in claim 130 further comprising the step of recording said time compressed representation of said audio/video source information stored in said storage means onto a removable recording medium.

161. A method as in claim 133 further comprising the step of recording the edited decompressed time compressed representation of said audio/video source information stored in said storage means onto a removable recording medium.

SUBD18 162. A method as in claim 114 further comprising the steps of:
selectively decompressing the time compressed representation of said audio/video source information stored in said storage means; and
recording the selectively decompressed time compressed representation of said audio/video source information stored in said random access storage means onto a removable recording medium.

163. A method as in claim 135 further comprising the steps of:
recording the selectively decompressed time compressed representation of said audio/video source information onto a removable recording medium; and
visually displaying the selectively decompressed time compressed representation of said audio/video source information stored on said removable recording medium for viewing by a user.

164. A method as in claim 122 wherein said digital audio/video source information is received from a CD-ROM.

165. A method as in claim 122 wherein said digital audio/video source information is received from an erasable optical disc.

166. A method as in claim 122 wherein said audio/video source information comprises a time compressed representation thereof received from a

television RF tuner.

~~S'BD₁~~ 167. A method as in claim 114 further comprising the step of recording the stored time compressed representation of said audio/video source information onto a magnetic recording medium.

168. A method as in claim 115 further comprising the step of recording the stored edited time compressed representation of said audio/video source information onto a magnetic recording medium.

~~SUBD₂~~ 169. A method as in claim 130 further comprising the step of recording the stored time compressed representation of said audio/video source information onto a magnetic recording medium.

170. A method as in claim 133 further comprising the step of recording the edited decompressed time compressed representation of said audio/video source information onto a magnetic recording medium.

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selectively decompressing the time compressed representation of said audio/video source information stored in said storage means; and
recording the selectively decompressed time compressed representation of said audio/video source information stored in said storage means onto a magnetic storage medium.

172. A method as in claim 135 further comprising the step of recording the selectively decompressed time compressed representation of said audio/video source information onto a magnetic recording medium.

~~SUB₂~~ 173. A method for handling analog and/or digital audio/video source information, the method comprising the steps of:

receiving analog and/or digital audio/video source information, said analog and/or digital audio/video source information comprising a multiplicity of video frames in the form of one or more full motion video programs;

converting received analog audio/video source information to corresponding digital audio/video source information;

converting received digital audio/video source information to

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corresponding analog audio/video source information;

compressing said received digital or converted corresponding digital audio/video source information into a time compressed representation thereof, said time compressed representation having an associated burst time period that is shorter than a time period associated with real time viewing of said digital or corresponding digital audio/video source information;

decompressing said time compressed representation into a decompressed real time representation of said digital or corresponding digital audio/video source information;

storing said decompressed real time representation of said digital or corresponding digital audio/video source information; and

serially transmitting said time compressed representation away from said audio/video transceiver apparatus to a selected destination in said burst time period.

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174. A method as in claim 173 further comprising the step of supplying timing information for association with said time compressed representation of said digital or corresponding digital audio/video source information.

175. A method as in claim 173 further comprising the step of recording said received analog or corresponding analog audio/video source information onto a recording medium.

176. A method as in claim 173 further comprising the step of recording said digital or corresponding digital audio/video source information onto a recording medium.

177. A method as in claim 175 wherein said received analog or corresponding analog audio/video source information is recorded onto a magnetic tape recording medium.

178. A method as in claim 176 wherein said received digital or corresponding digital audio/video source information is recorded onto a magnetic tape recording medium.

179. A method as in claim 176 wherein said received digital or

corresponding digital audio/video source information is recorded onto a CD-ROM.

180. A method as in claim 176 wherein said received digital or corresponding digital audio/video source information is recorded onto a WORM optical disc.

181. A method as in claim 176 wherein said received digital or corresponding digital audio/video source information is recorded onto an erasable optical disc.

182. A method as in claim 173 wherein said received analog and/or digital audio/video source information is received from an audio/video recording and playback apparatus.

183. A method as in claim 173 wherein said digital audio/video source information is received over a high speed bus.

184. A method as in claim 183 wherein said digital audio/video source information is received over an optical bus.

185. A method as in claim 173 wherein said audio/video source information is received over a fiber optic channel.

SUBD23 186. A method as in claim 114 further comprising the steps of:
editing said time compressed representation of said audio/video source information; and
storing the edited time compressed representation of said audio/video source information in said storage means.

187. A method as in claim 114 wherein said audio/video source information is received over a microwave link and wherein said time compressed representation of said audio/video source information stored in said storage means is transmitted over a microwave link.

SUBD23 188. A method as in claim 114 wherein said time compressed representation of said audio/video source information is stored in a bubble memory.

189. A method as in claim 114 wherein said time compressed

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representation of said audio/video source information is stored on one or more magnetic disks.

190. A method as in claim 114 wherein said time compressed representation of said audio/video source information is stored on digital paper.

191. A method as in claim 143 wherein said time compressed representation of said audio/video source information is stored in a bubble memory.

192. A method as in claim 143 wherein said time compressed representation of said audio/video source information is stored on one or more magnetic disks.

193. A method as in claim 143 wherein said time compressed representation of said audio/video source information is stored on digital paper.

C3 SUB A10 194. A method for handling audio/video source information, the method comprising:

providing a network that includes a plurality of audio/video transceivers, coupled via one or more communications links; receiving, at one or more of said audio/video transceivers, audio/video source information, said audio/video source information comprising a multiplicity of video frames in the form of one or more full motion video programs, said audio/video source information being received as a time compressed representation thereof having an associated burst time period that is shorter than a time period associated with real time viewing of said audio/video source information.

storing the time compressed representation of said audio/video source information; and

serially transmitting said stored time compressed representation of said audio/video source information in said burst time period to another one of said plurality of audio/video transceivers.

Remarks

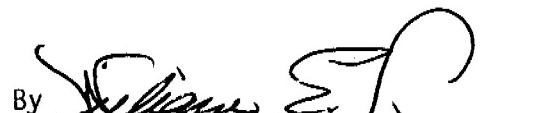
The title has been amended to reflect the presently claimed subject matter. Figure 2 of the drawings has been amended to correct a spelling error. Claims 42, 48, 51, 53, 73-75, and 113 have been amended to correct some typographical errors and language inconsistencies that have come to applicants' attention. New method claims 114-194, directed to the method which the apparatus of claims 26-113 is designed to perform, have been added to provide the scope of claims coverage to which applicant believes he is entitled.

Claims 26-113 have been variously rejected under the judicially created doctrine of double patenting as being unpatentable over various claims of U.S. Patent Nos. 4,963,995 and 5,057,932, commonly owned with the present application. Applicant submits herewith a terminal disclaimer under 37 CFR 1.321(b) that is believed to overcome the outstanding double patenting rejection.

It is therefore respectfully submitted that this application is now in condition for allowance of previously pending apparatus claims 26-113, as well as method claims 114-194, presented herewith. Favorable action is accordingly solicited.

Respectfully submitted,

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September 27, 1993
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